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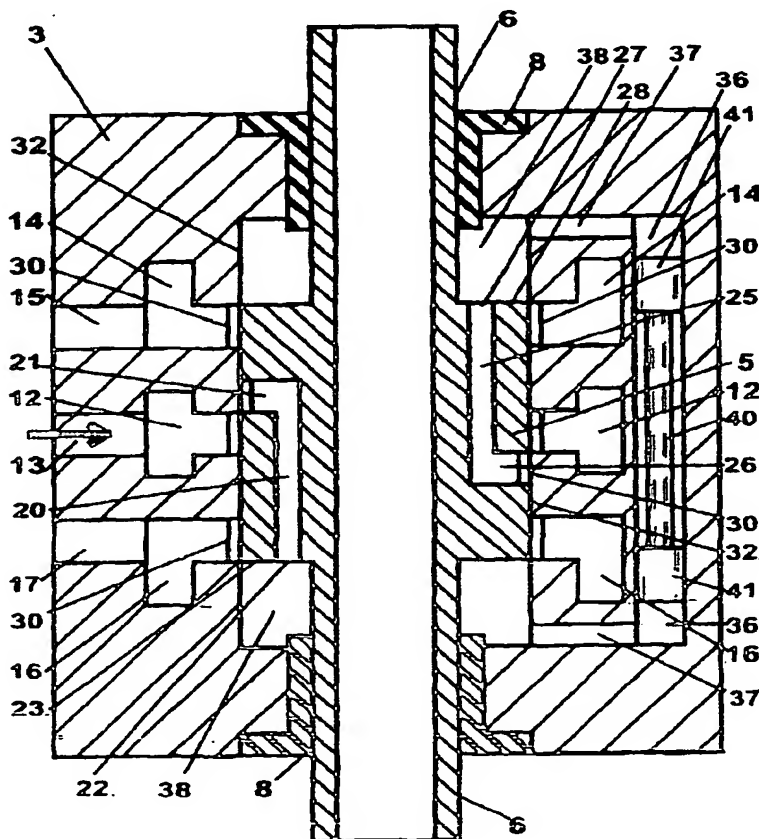
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(54) Title: SONIC DRILL



(57) Abstract: A sonic drilling apparatus having a work piston within a cylinder chamber to provide a vibratory force through the alternate application of fluid under pressure into the bore above and below the piston in a manner that the piston will be forced to reciprocate within the bore. The cylinder chamber includes an inlet gallery to allow fluid under pressure to pass into the bore above a first face of the work piston and an exhaust gallery to allow fluid to escape from the bore below the second face of the work piston. A relief bypass is provided to prevent excessive build up of pressure in the bore during the reciprocating movement of the work piston.

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